

This Page Is Inserted by IFW Operations
and is not a part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

As rescanning documents *will not* correct images,
please do not report the images to the
Image Problem Mailbox.



UNITED STATES PATENT AND TRADEMARK OFFICE

RF

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/748,277	12/27/2000	Jae-Lag Ma	8733.363.00	4729

30827 7590 10/10/2003

MCKENNA LONG & ALDRIDGE LLP
1900 K STREET, NW
WASHINGTON, DC 20006

EXAMINER

RUDE, TIMOTHY L

ART UNIT PAPER NUMBER

2871

DATE MAILED: 10/10/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/748,277

Applicant(s)

MA ET AL.

Examiner

Timothy L Rud

Art Unit

2871

-- The MAILING DATE of this communication appears on the cover sheet with the corresponding address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 August 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 6-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 6-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Claims

1. Claim 6 is amended necessitating new grounds of rejection. Claim 12 is added.

Drawings

2. The drawings were received on 01 August 2003. These drawings are accepted by examiner.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

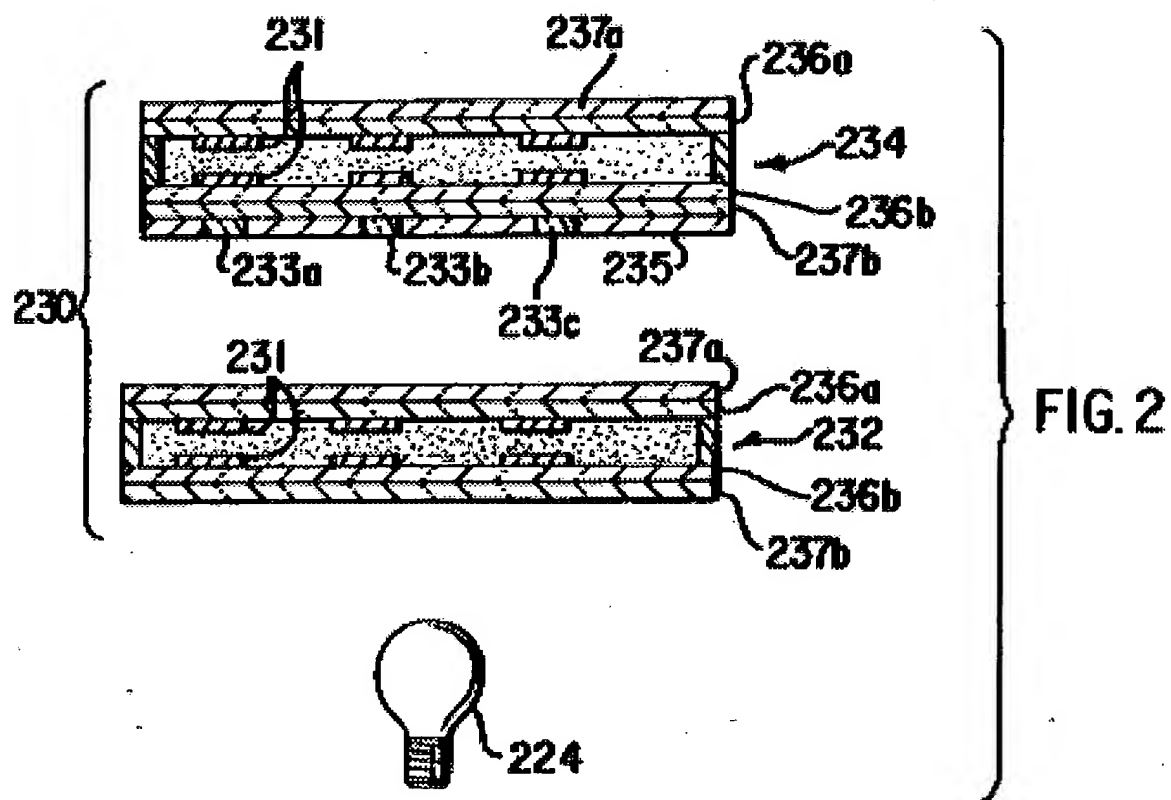
(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

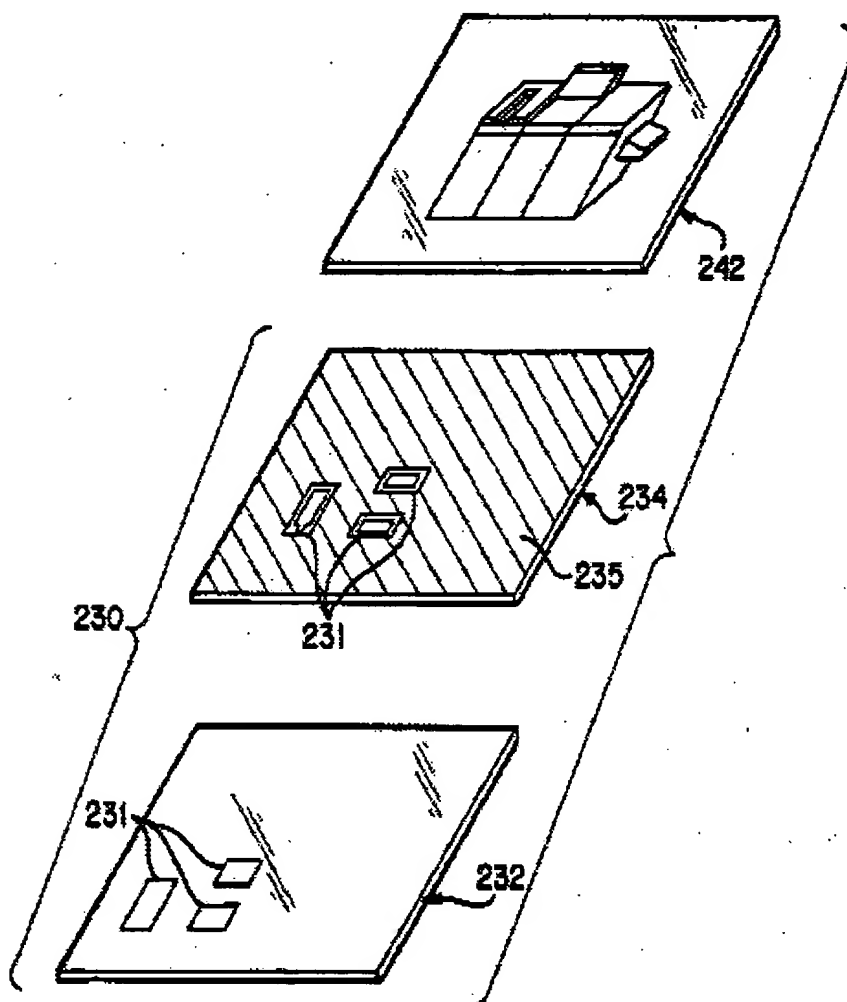
This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 6-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dingwall et al (Dingwall) USPAT 5,307,188.

As to claims 6 and 9-11, Dingwall teaches in Figures 2 and 3 (col. 5, lines 33-40 and col. 7, line 60 through col. 8 line 28), a liquid crystal display (LCD) device, comprising:

an upper polarizer, 237a; on an upper substrate, 236a;
a lower substrate, 236b, on a lower polarizer, 237b, (Applicant's redundant lower substrate); a liquid crystal layer disposed between the upper substrate and the lower substrate; and a backlight device, 224, disposed opposite and adjacent to the lower polarizer for emitting light toward the lower polarizer (Figure 4) (please note that adjacent does not preclude structures between those items considered to be adjacent, e.g., two houses may be adjacent despite the existence of an intervening garage); wherein the lower polarizer includes at least one opaque surround or black mask, 235, (Applicant's light shielding film), formed in a rectangular shape only along the peripheral portion of the lower polarizer (235 shaped to run along all four sides of only the rectangular lower polarizer as illustrated in Figure 3) wherein the black mask absorbs light (col. 8, lines 29-33, and col. 13, lines 25 and 26).



**FIG. 3**

As to claims 7 and 8, Dingwall teaches (col. 8, lines 11-28) a liquid crystal display (LCD) device of claim 1, wherein the at least one opaque surround or black mask, 235, (Applicant's light shielding film) is formed by a photographic process, by offset lithography (Applicant's coating), or by screen printing (Applicant's printed material) black mask materials that absorb the light (col. 8, lines 29-33, and col. 13, lines 25 and 26).

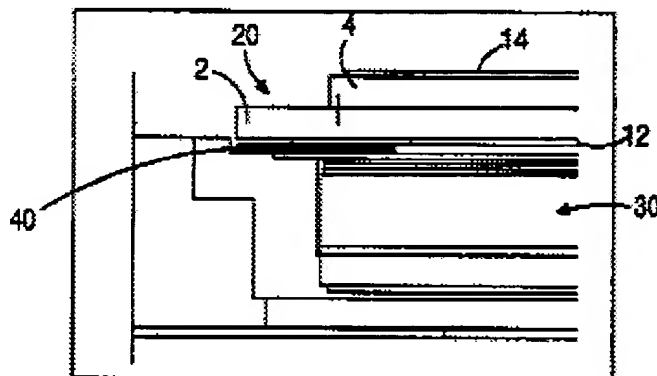
Art Unit: 2871

4. Claims 6-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's admitted prior art (APA) in view of Dingwall.

As to claims 6 and 9-12, APA discloses in Figures 1-4 (Specification pages 2-4), a dot matrix (Specification, Page 2, lines 18-22) liquid crystal display (LCD) device, comprising:

Fig. 1

(Conventional Art)



an upper polarizer, 14; on an upper substrate, 4;

a lower substrate, 4, on a lower polarizer, 12;

a liquid crystal layer (not shown) disposed between the upper substrate and the lower substrate; and

a backlight device, 30, disposed opposite and adjacent to the lower polarizer for emitting light toward the lower polarizer (Figure 1) (please note that adjacent does not

Art Unit: 2871

preclude structures between those items considered to be adjacent, e.g., two houses may be adjacent despite the existence of an intervening garage);

wherein at least a black pad, 40, that acts as a light shield (Applicant's light shielding film) in a peripheral portion formed in a rectangular shape only along a peripheral portion (Specification, Page 3, lines 11-14); and

wherein the light shielding film absorbs light (property of the color black).

APA does not explicitly disclose a lower polarizer that includes said light shielding film.

Dingwall teaches in Figures 2 and 3 (col. 5, lines 33-40 and col. 7, line 60 through col. 8 line 28), a liquid crystal display (LCD) device, comprising: a lower substrate, 236b, on a lower polarizer, 237b, that includes an opaque black mask, 235 (Applicant's light shielding film), to provide greater flexibility by first printing the black mask to define the image elements (or viewing area) with minimal alignment concerns to eliminate light leaks and allow the use of a true black mask rather than a gray mask to provide a true dead front (col. 5, lines 33-46).

Dingwall is evidence that ordinary workers in the art of liquid crystals would find the reason, suggestion, or motivation to add a lower polarizer that includes an opaque black mask (Applicant's light shielding film) to provide greater flexibility by first printing the black mask to define the image elements (or viewing area) with minimal alignment concerns to eliminate light leaks and allow the use of a true black mask rather than a gray mask to provide a true dead front.

Therefore, it would have been obvious to one having ordinary skill in the art of liquid crystals at the time the invention was made to modify the LCD of APA with a lower polarizer that includes a light shielding film of Dingwall to provide greater flexibility by first printing the black mask to define the viewing area with minimal alignment concerns to eliminate light leaks and allow the use of a true black mask rather than a gray mask to provide a true dead front.

As to claims 7 and 8, Dingwall teaches (col. 8, lines 11-28) a liquid crystal display (LCD) device of claim 1, wherein the at least one opaque surround or black mask, 235, (Applicant's light shielding film) is formed by a photographic process, by offset lithography (Applicant's coating), or by screen printing (Applicant's printed material) black mask materials that absorb the light (col. 8, lines 29-33, and col. 13, lines 25 and 26).

Response to Arguments

5. Applicant's arguments with respect to claims 6-12 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Application/Control Number: 09/748,277
Art Unit: 2871

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy L Rude whose telephone number is (703) 305-0418. The examiner can normally be reached on Monday through Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert H Kim can be reached on (703) 305-3492. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 872-9306 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4900.



TLR
October 8, 2003

Timothy L Rude
Examiner
Art Unit 2871



TOANTON
PRIMARY EXAMINER